

Ryan Nichol

List of Publications by Year in descending order

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96
papers

6,659
citations

57758

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81
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96
docs citations

96
times ranked

3233
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved Search for Muon-Neutrino to Electron-Neutrino Oscillations in MINOS. Physical Review Letters, 2011, 107, 181802.	7.8	574
2	Observation of Muon Neutrino Disappearance with the MINOS Detectors in the NuMI Neutrino Beam. Physical Review Letters, 2006, 97, 191801.	7.8	430
3	Measurement of Neutrino Oscillations with the MINOS Detectors in the NuMI Beam. Physical Review Letters, 2008, 101, 131802.	7.8	262
4	The magnetized steel and scintillator calorimeters of the MINOS experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 596, 190-228.	1.6	230
5	First measurement of neutrino oscillation parameters using neutrinos and antineutrinos by NOvA. Physical Review Letters, 2019, 123, 151803.	7.8	213
6	The NuMI neutrino beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 806, 279-306.	1.6	202
7	Measurement of Neutrino and Antineutrino Oscillations Using Beam and Atmospheric Data in MINOS. Physical Review Letters, 2013, 110, 251801.	7.8	196
8	Design and initial performance of the Askaryan Radio Array prototype EeV neutrino detector at the South Pole. Astroparticle Physics, 2012, 35, 457-477.	4.3	191
9	Measurement of the Neutrino Mass Splitting and Flavor Mixing by MINOS. Physical Review Letters, 2011, 106, 181801.	7.8	188
10	Combined Analysis of $\nu_{\mu} \rightarrow \nu_{\tau}$ and $\nu_{\mu} \rightarrow \nu_{\tau}$ Appearance in MINOS Using Accelerator. Physical Review Letters, 2014, 112, 191801.	7.8	187
11	Electron Neutrino and Antineutrino Appearance in the Full MINOS Data Sample. Physical Review Letters, 2013, 110, 171801.	7.8	174
12	Constraints on Cosmic Neutrino Fluxes from the Antarctic Impulsive Transient Antenna Experiment. Physical Review Letters, 2006, 96, 171101.	7.8	153
13	Observational constraints on the ultrahigh energy cosmic neutrino flux from the second flight of the ANITA experiment. Physical Review D, 2010, 82, .	4.7	150
14	The Antarctic Impulsive Transient Antenna ultra-high energy neutrino detector: Design, performance, and sensitivity for the 2006-2007 balloon flight. Astroparticle Physics, 2009, 32, 10-41.	4.3	138
15	Constraints on Oscillation Parameters from $\nu_{\mu} \rightarrow \nu_{\tau}$ Appearance and $\nu_{\mu} \rightarrow \nu_{\tau}$ Disappearance in NOvA. Physical Review Letters, 2017, 118, 231801.	7.8	138
16	Study of muon neutrino disappearance using the Fermilab Main Injector neutrino beam. Physical Review D, 2008, 77, .	4.7	126
17	Observations of the Askaryan Effect in Ice. Physical Review Letters, 2007, 99, 171101.	7.8	117
18	Measurement of neutrino velocity with the MINOS detectors and NuMI neutrino beam. Physical Review D, 2007, 76, .	4.7	111

#	ARTICLE	IF	CITATIONS
19	Active to Sterile Neutrino Mixing Limits from Neutral-Current Interactions in MINOS. Physical Review Letters, 2011, 107, 011802.	7.8	108
20	New constraints on oscillation parameters from θ_{12} appearance and θ_{13} disappearance in the NOvA experiment. Physical Review D, 2018, 98, .	4.7	108
21	Observation of Ultrahigh-Energy Cosmic Rays with the ANITA Balloon-Borne Radio Interferometer. Physical Review Letters, 2010, 105, 151101.	7.8	107
22	New Limits on the Ultrahigh Energy Cosmic Neutrino Flux from the ANITA Experiment. Physical Review Letters, 2009, 103, 051103.	7.8	95
23	Characteristics of Four Upward-Pointing Cosmic-Ray-like Events Observed with ANITA. Physical Review Letters, 2016, 117, 071101.	7.8	94
24	Neutrino and antineutrino inclusive charged-current cross section measurements with the MINOS near detector. Physical Review D, 2010, 81, .	4.7	91
25	Observation of an Unusual Upward-Going Cosmic-Ray-like Event in the Third Flight of ANITA. Physical Review Letters, 2018, 121, 161102.	7.8	91
26	An upper limit to the photon fraction in cosmic rays above 1019eV from the Pierre Auger Observatory. Astroparticle Physics, 2007, 27, 155-168.	4.3	90
27	Performance of two Askaryan Radio Array stations and first results in the search for ultrahigh energy neutrinos. Physical Review D, 2016, 93, .	4.7	87
28	Measurement of the Neutrino Mixing Angle θ_{13} in NOvA. Physical Review Letters, 2017, 118, 151802.	7.8	87
29	Testing Lorentz Invariance and CPT Conservation with NuMI Neutrinos in the MINOS Near Detector. Physical Review Letters, 2008, 101, 151601.	7.8	86
30	Search for Lorentz Invariance and CP Violation with the MINOS Far Detector. Physical Review Letters, 2010, 105, 151601.	7.8	83
31	Search for Lorentz invariance and CP violation with muon antineutrinos in the MINOS Near Detector. Physical Review D, 2012, 85, .	4.7	71
32	Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments. Physical Review Letters, 2016, 117, 151801.	7.8	71
33	Improved Measurement of Muon Antineutrino Disappearance in MINOS. Physical Review Letters, 2012, 108, 191801.	7.8	70
34	The large analog bandwidth recorder and digitizer with ordered readout (LABRADOR) ASIC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 583, 447-460.	1.6	64
35	Search for Sterile Neutrinos Mixing with Muon Neutrinos in MINOS. Physical Review Letters, 2016, 117, 151803.	7.8	60
36	First observations of separated atmospheric ν_{μ} and ν_{τ} events in the MINOS detector. Physical Review D, 2006, 73, .	4.7	59

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37	Search for sterile neutrino mixing in the MINOS long-baseline experiment. Physical Review D, 2010, 81, .	4.7	59
38	Observation of muon intensity variations by season with the MINOS far detector. Physical Review D, 2010, 81, .	4.7	56
39	First Direct Observation of Muon Antineutrino Disappearance. Physical Review Letters, 2011, 107, 021801.	7.8	56
40	Energy and flux measurements of ultra-high energy cosmic rays observed during the first ANITA flight. Astroparticle Physics, 2016, 77, 32-43.	4.3	55
41	Study of quasielastic scattering using charged-current $\nu_{\mu}e \rightarrow \mu\nu_e$ interactions in the MINOS near detector. Physical Review D, 2015, 91, .	4.7	53
42	Constraints on the diffuse high-energy neutrino flux from the third flight of ANITA. Physical Review D, 2018, 98, .	4.7	53
43	Anisotropy studies around the galactic centre at EeV energies with the Auger Observatory. Astroparticle Physics, 2007, 27, 244-253.	4.3	51
44	Search for Active Neutrino Disappearance Using Neutral-Current Interactions in the MINOS Long-Baseline Experiment. Physical Review Letters, 2008, 101, 221804.	7.8	51
45	Measurement of the atmospheric muon charge ratio at TeV energies with the MINOS detector. Physical Review D, 2007, 76, .	4.7	46
46	Search for Muon-Neutrino to Electron-Neutrino Transitions in MINOS. Physical Review Letters, 2009, 103, 261802.	7.8	46
47	New constraints on muon-neutrino to electron-neutrino transitions in MINOS. Physical Review D, 2010, 82, .	4.7	45
48	First constraints on the ultra-high energy neutrino flux from a prototype station of the Askaryan Radio Array. Astroparticle Physics, 2015, 70, 62-80.	4.3	44
49	Search for active-sterile neutrino mixing using neutral-current interactions in NOvA. Physical Review D, 2017, 96, .	4.7	42
50	The MINOS calibration detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 556, 119-133.	1.6	38
51	A prototype station for ARIANNA: A detector for cosmic neutrinos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 624, 85-91.	1.6	38
52	Ultrarelativistic magnetic monopole search with the ANITA-II balloon-borne radio interferometer. Physical Review D, 2011, 83, .	4.7	37
53	Measurements of atmospheric neutrinos and antineutrinos in the MINOS far detector. Physical Review D, 2012, 86, .	4.7	34
54	Accelerator Measurements of Magnetically Induced Radio Emission from Particle Cascades with Applications to Cosmic-Ray Air Showers. Physical Review Letters, 2016, 116, 141103.	7.8	33

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55	The MINOS light-injection calibration system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 492, 325-343.	1.6	30
56	Search for flavor-changing non-standard neutrino interactions by MINOS. Physical Review D, 2013, 88, .	4.7	28
57	Light sterile neutrino sensitivity at the nuSTORM facility. Physical Review D, 2014, 89, .	4.7	28
58	In situ radioglaciological measurements near Taylor Dome, Antarctica and implications for ultra-high energy (UHE) neutrino astronomy. Astroparticle Physics, 2008, 29, 130-157.	4.3	27
59	Sudden stratospheric warmings seen in MINOS deep underground muon data. Geophysical Research Letters, 2009, 36, .	4.0	26
60	An interferometric analysis method for radio impulses from ultra-high energy particle showers. Astroparticle Physics, 2015, 60, 72-85.	4.3	25
61	Charge-separated atmospheric neutrino-induced muons in the MINOS far detector. Physical Review D, 2007, 75, .	4.7	20
62	IceRay: An IceCube-centered radio-Cherenkov GZK neutrino detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 604, S64-S69.	1.6	20
63	Measurements and modeling of near-surface radio propagation in glacial ice and implications for neutrino experiments. Physical Review D, 2018, 98, .	4.7	18
64	Measurements of radio propagation in rock salt for the detection of high-energy neutrinos. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 599, 184-191.	1.6	17
65	Search for the disappearance of muon antineutrinos in the NuMI neutrino beam. Physical Review D, 2011, 84, .	4.7	16
66	Observation of muon intensity variations by season with the MINOS near detector. Physical Review D, 2014, 90, .	4.7	16
67	THE FIRST LIMITS ON THE ULTRA-HIGH ENERGY NEUTRINO FLUENCE FROM GAMMA-RAY BURSTS. Astrophysical Journal, 2011, 736, 50.	4.5	15
68	Constraints on large extra dimensions from the MINOS experiment. Physical Review D, 2016, 94, .	4.7	15
69	An evaluation of Minor Groove Binders as anti-fungal and anti-mycobacterial therapeutics. European Journal of Medicinal Chemistry, 2017, 136, 561-572.	5.5	15
70	Measurement of the real dielectric permittivity ϵ'_μ of glacial ice. Astroparticle Physics, 2019, 108, 63-73.	4.3	15
71	Comparisons of the MINOS near and far detector readout systems at a test beam. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 609, 106-113.	1.6	13
72	Measurement of the underground atmospheric muon charge ratio using the MINOS Near Detector. Physical Review D, 2011, 83, .	4.7	13

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73	Observation in the MINOS far detector of the shadowing of cosmic rays by the sun and moon. <i>Astroparticle Physics</i> , 2011, 34, 457-466.	4.3	12
74	Measurement of single $\bar{\nu}_e$ production by coherent neutral-current $\bar{\nu}_e$ Fe interactions in the MINOS Near Detector. <i>Physical Review D</i> , 2016, 94, .	4.7	12
75	Target neutrino mass precision for determining the neutrino hierarchy. <i>Physical Review D</i> , 2020, 101, .	4.7	12
76	Precision measurement of the speed of propagation of neutrinos using the MINOS detectors. <i>Physical Review D</i> , 2015, 92, .	4.7	11
77	Antarctic radio frequency albedo and implications for cosmic ray reconstruction. <i>Radio Science</i> , 2015, 50, 1-17.	1.6	11
78	Antarctic Surface Reflectivity Measurements from the ANITA-3 and HiCal-1 Experiments. <i>Journal of Astronomical Instrumentation</i> , 2017, 06, 1740002.	1.5	11
79	On the linearity of the MINOS light-injection calibration system. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2004, 521, 361-366.	1.6	10
80	Antarctic surface reflectivity calculations and measurements from the ANITA-4 and HiCal-2 experiments. <i>Physical Review D</i> , 2018, 98, .	4.7	10
81	New Results from MINOS. <i>Nuclear Physics, Section B, Proceedings Supplements</i> , 2013, 235-236, 105-111.	0.4	9
82	Radio detection of high-energy particles with the ANITA experiment. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2011, 626-627, S30-S35.	1.6	8
83	Observation of seasonal variation of atmospheric multiple-muon events in the MINOS Near and Far Detectors. <i>Physical Review D</i> , 2015, 91, .	4.7	8
84	Dynamic tunable notch filters for the Antarctic Impulsive Transient Antenna (ANITA). <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2018, 894, 47-56.	1.6	8
85	The simulation of the sensitivity of the Antarctic Impulsive Transient Antenna (ANITA) to Askaryan radiation from cosmogenic neutrinos interacting in the Antarctic ice. <i>Journal of Instrumentation</i> , 2019, 14, P08011-P08011.	1.2	7
86	Comparisons of annual modulations in MINOS with the event rate modulation in CoGeNT. <i>Physical Review D</i> , 2013, 87, .	4.7	6
87	Constraints on the ultra-high-energy neutrino flux from Gamma-Ray bursts from a prototype station of the Askaryan radio array. <i>Astroparticle Physics</i> , 2017, 88, 7-16.	4.3	6
88	Search for flavor-changing nonstandard neutrino interactions using $\bar{\nu}_e$ appearance in MINOS. <i>Physical Review D</i> , 2017, 95, .	4.7	6
89	Development toward a ground-based interferometric phased array for radio detection of high energy neutrinos. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2017, 869, 46-55.	1.6	5
90	Spontaneous light emission from fibers in MINOS. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2005, 545, 145-155.	1.6	4

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91	Commissioning of a High Pressure Time Projection Chamber with Optical Readout. <i>Instruments</i> , 2021, 5, 22.	1.8	4
92	RESULTS FROM THE ANITA EXPERIMENT. <i>Modern Physics Letters A</i> , 2007, 22, 2237-2246.	1.2	2
93	Measurement of the multiple-muon charge ratio in the MINOS Far Detector. <i>Physical Review D</i> , 2016, 93, .	4.7	1
94	INTRODUCTION TO THE SALSA, A SALTDOME SHOWER ARRAY AS A GZK NEUTRINO OBSERVATORY. <i>International Journal of Modern Physics A</i> , 2006, 21, 252-253.	1.5	0
95	PRELIMINARY RESULT FROM ANITA EXPERIMENT. <i>Modern Physics Letters A</i> , 2008, 23, 1419-1430.	1.2	0
96	Phased arrays: A strategy to lower the energy threshold for neutrinos. <i>EPJ Web of Conferences</i> , 2017, 135, 05007.	0.3	0